# IAP6 Rec'd PCT/PTO 18 APR 2007

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES			ATTORNEY'S DOCKET NUMBER LEO 003 PA				
DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371			U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/580,361				
	ATIONAL APPLICATION NO. DE2004/002638	INTERNATIONAL FILING DATE 11/29/2004	PRIORITY DATE CLAIMED 11/28/2003				
	INVENTION tion of Semiconductor Substrates W	ith Buried Layers by Joining (Bonding)	) Semiconductor Wafers				
	APPLICANT(S) FOR DO/EO/US Roy Knechtel and Andrej Lenz						
		ites Designated/Elected Office (DO/EC	/US) the following items and other information:				
1.	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.						
2.	This is a SECOND or SUBSEQUENT so	ubmission of items concerning a submission	n under 35 U.S.C. 371.				
3.	3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.						
4.	The US has been elected (Article 31).						
5. 🔲	A copy of the International Application	as filed (35 U.S.C. 371(c)(2))					
	a. Li is attached hereto (required	only if not communicated by the Internation	al Bureau).				
· ·	b. has been communicated by	the International Bureau.					
	c. is not required, as the applic	cation was filed in the United States Receivi	ng Office (RO/US).				
6.	An English language translation of the	International Application as filed (35 U.S.C	3. 371(c)(2)).				
,	a. is attached hereto.	,					
: _ <u>\</u>	b. has been previously submitt	ted under 35 U.S.C. 154(d)(4).					
7.	Amendments to the claims of the Inter	rnational Application under PCT Article 19 (	35 U.S.C. 371(c)(3))				
٠	a. are attached hereto (require	ed only if not communicated by the Internat	ional Bureau).				
	b. have been communicated to	by the International Bureau.	· · · · · · · · · · · · · · · · · · ·				
	c. have not been made; howe	ever, the time limit for making such amendm	nents has NOT expired.				
	d. have not been made and w	rill not be made.					
8.	An English language translation of the	e amendments to the claims under PCT Art	icle 19 (35 U.S.C. 371(c)(3)).				
9. 🔲	An oath or declaration of the inventor(	s) (35 U.S.C. 371(c)(4)).	. •				
10.	O. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).						
Items	s 11 to 20 below concern document(s)	or information included:					
11.	An Information Disclosure Statement	under 37 CFR 1.97 and 1.98.					
12.	An assignment document for recording	g. A separate cover sheet in compliance wit	h 37 CFR 3.28 and 3.31 is included.				
13. 🔽	A preliminary amendment.						
14.	An Application Data Sheet under 37 C	FR 1.76.					
15.	A substitute specification.		•				
16. 🗖	A power of attorney and/or change of	address letter.					
17.	A computer-readable form of the sequ	ence listing in accordance with PCT Rule 1	3 <i>ter.</i> 2 and 37 CFR 1.821- 1.825.				
18.	A second copy of the published Interna	ational Application under 35 U.S.C. 154(d)(	<b>4)</b>				
19.		e translation of the international application					

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

	U.S. APPLICATION NO. (if known, see 37 CFR 1.5)	ATTORNEY'S DOCKET NUMBER					
Express Mail Certificate; Filing of Requirements, with copy of Notification of Missing Requirements; check for \$730. Return Receipt Postcard  The following fees have been submitted  21.	10/580,361	PCT/DE2004/0	02638	LEO 003 PA			
21.	Express Mail Certificate; Filing of Requirer	ments, with copy of No	otification of Miss	ing Requirements; o	check for \$730;		
21.	7	·		LONGOUR ATIONS	BTO LIGE ONLY		
22.	<u> </u>		****		T PTO USE ONLY		
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)	21. Basic national fee (37 CFR 1.492(a))		\$300				
by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)	22. Examination fee (37 CFR 1.492(c))						
If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Articlo 33(1)-(1-4)	by IPEA/US indicates all claims satisfy provision	ns of PCT Article 33(1)-(4).	\$0	\$			
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(l)).  The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  Total Sheets	If the written opinion of the ISA/US or the International preserved indicates all claims satisfy provisions. Search fee (37 CFR 1.445(a)(2)) has been paid on the International Searching Authority	\$:					
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).  The fee is \$250 for each additional 50 sheets of paper or fraction thereof.  Total Sheets	TOTAL OF 21, 22 and 23 =			. 0			
thereof (round up to a whole number)  -100 =   /50 =   x \$250   \$  Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).  CLAIMS   NUMBER FILED   NUMBER EXTRA   RATE   \$  Total claims   28   -20 =   8   x \$50   \$   400    Independent claims   4   -3 =   1   x \$200   \$   200    MULTIPLE DEPENDENT CLAIM(S) (if applicable)   + \$360   \$    TOTAL OF ABOVE CALCULATIONS =   \$600    Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.  SUBTOTAL =   \$600    Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).    TOTAL NATIONAL FEE =   \$730    Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property   +    TOTAL FEES ENCLOSED   \$600   \$60	Additional fee for specification and drawings filed in sequence listing in compliance with 37 CFR 1.8 electronic medium) (37 CFR 1.492(j)).						
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE \$  Total claims 28 -20 = 8							
after the date of commencement of the national stage (37 CFR 1.492(h)).  CLAIMS NUMBER FILED NUMBER EXTRA RATE \$  Total claims 28 - 20 = 8	- 100 = /50 =		× \$250	\$	·		
Total claims 28 - 20 = 8			oath or declaration	\$	·		
Independent claims 4 -3 = 1	CLAIMS NUMBER FILED	NUMBER EXTRA	RATE	\$			
MULTIPLE DEPENDENT CLAIM(S) (if applicable)  TOTAL OF ABOVE CALCULATIONS = \$ 600  Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.  SUBTOTAL = \$ 600  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ 730 MR (E.PEY) MRIAMANCA 18586361  Amount to be \$ 488.  ### TOTAL FEES ENCLOSED = 18586361	Total claims 28 - 20 =	8	× \$50	\$ 400			
TOTAL OF ABOVE CALCULATIONS = \$ 600  Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.  SUBTOTAL = \$ 600  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). + 130  TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$ \$ 730  TOTAL FEES ENCLOSED = \$ \$ 730  Amount to be refunded: \$ 466  \$ 466	Independent claims 4 - 3 =	1	x \$200	\$ 200			
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.  SUBTOTAL = \$ 600  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ \$ 730  TOTAL FEES ENCLOSED = \$ \$ 730  Amount to be \$ 400.00 per property  ###################################	MULTIPLE DEPENDENT CLAIM(S) (if applicable)	+ \$360	\$				
SUBTOTAL = \$ 600  Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ 730  TOTAL FEES ENCLOSED = \$ 730  Amount to be refunded: \$ 400		TOTAL OF ABOVE	CALCULATIONS =	\$ 600	1		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ 730  Amount to be refunded: \$ 466.	Applicant claims small entity status. See 37 CFR 1.	27. Fees above are reduc	ed by 1/2.				
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).  TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property  TOTAL FEES ENCLOSED = \$ 730  TOTAL FEES ENCLOSED = \$ 730  Amount to be refunded: \$ 466  \$ 466			SUBTOTAL =	\$ 600	1		
TOTAL NATIONAL FEE = \$ 730  Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$ 730 HB CHILD HB C		nslation later than 30 month	ns from the earliest +	\$			
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +  TOTAL FEES ENCLOSED = 1.21(h)		TOTAL	NATIONAL FEE =	_			
Amount to be ### FE   refunded: \$ 488 ### ### ### #### ##################			st be accompanied +	, , , , , ,	:		
Amount to be ### FE   refunded: \$ 488 ### ### ### #### ##################		TOTAL F	EES ENCLOSED =	\$ 730 (2697 (EFFEY) HORA	1864 A 18508761		
€2 i U lamount to be 200			. Bi Ef	Amount to be	s		
OU LOE MINIMON I 14M		. · · · ·	42 FC	Amount to be	חם ממר		

. 4

a. 🗸	A check in the amour	nt of \$		_ to cover the	above fe	es is enclo	osed.				:
ь. 🗖	Please charge my De A duplicate copy of the			in the amour	nt of \$		_ to cover th	ne above fees.		•	•
c. 🗸 🖠	The Commissioner is Account No. <u>50216</u>					nay be req	uired, or cre	edit any overpa	yment to D	eposit	
d. 🔲	Fees are to be charge be included on this t							redit card info	mation s	hould not	
	Where an appropriate nted to restore the Int				met, a p	etition to	revive (37 (	CFR 1.137(a) o	r (b)) mus	t be filed	
							·.		•		
SEND A	LL CORRESPONDEN	CE TO:			7	Die	and	CH	the	2	
	omer Number 2 ens & Showalte						URE C. Stever	ns	: 5		•
	Corporate Way on OH 45459-					28,046	RATION N	IMRER	* •		-
	* · · · · · · · · · · · · · · · · · · ·	•				NEO101					•
•	4 2 4 4 4 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6				* *		in the second	•	F = \$	4 95 .	
			٠				i · ·	· 1/2	<b>5</b> 6	, Night	
t .	: , , , , , , , , , , , , , , , , , , ,					i.			3. / :	:	

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

### Application of

Applicants

Roy Knechtel and Andrej Lenz

International Appln. No.

PCT/DE2004/002638

U.S. Application No.

10/580,361 11/29/2004

International Filing Date Title

PRODUCTION OF SEMICONDUCTOR

SUBSTRATES WITH BURIED LAYERS BY JOINING

(BONDING) SEMICONDUCTOR WAFERS

Docket

LEO 003 PA

MS PCT Commissioner for Patents PO Box 1450 Alexandria VA 22313-1450

SUSBLEALATENT

Sir:

"Express Mail" Mailing Label Number <u>EQ916963182US</u>
Date of Deposit <u>April 18, 2007</u>

I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to MS PCT, Commissioner for Patents, PO Box 1450, Alexandria VA 22313-1450.

Richard C. Stevens Reg. #28,046

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of

**Applicants** 

Roy Knechtel and Andrej Lenz

International Appln. No.

PCT/DE2004/002638

U.S. Application No.

10/580,361

International Filing Date

Commissioner for Patents

Alexandria VA 22313

11/29/2004

Title

PRODUCTION OF SEMICONDUCTOR

SUBSTRATES WITH BURIED LAYERS BY JOINING

(BONDING) SEMICONDUCTOR WAFERS

Docket

MS PCT

PO Box 1450

LEO 003 PA

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: MS PCT, Commissioner for Patents, PO Box 1450, Alexandria VA 22313-1450 on April 18, 2007.

2313-1450 OH APHI 16, 2007

Reg. No. 28,046

Sir:

#### **FILING OF REQUIREMENTS**

Pursuant to the *Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office (DO/EO/US)* mailed February 20, 2007 in the above-identified patent application, enclosed herewith is 1) a translation of the application into English; 2) a copy of the *Notification of Missing Requirements*, and 3) payment in the amount of \$130 for the surcharge for providing the translation later than the appropriate 30 months from the priority date.

Also submitted herewith is a Preliminary Amendment.

Respectfully submitted,

STEVENS & SHOWALTER, L.L.P.

Richard C. Stevens, Reg. No. 28,046

7019 Corporate Way

Dayton, Ohio 45459-4238 Telephone: (937) 438-6848

Facsimile: (937) 438-2124 Email: rcstevens@speakeasy.net



29673

# RECEIVED FEB 2 3 2007

#### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE UNITED STATES DEFARIMENT OF COMM.
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

U.S. APPLICATION NUMBER NO.

STEVENS & SHOWALTER LLP

7019 CORPORATE WAY DAYTON, OH 45459-4238 FIRST NAMED APPLICANT

ATTY. DOCKET NO.

10/580,361

Roy Knechtel

**LEO 003 PA** 

INTERNATIONAL APPLICATION NO.

PCT/DE04/02638

I.A. FILING DATE

PRIORITY DATE

11/29/2004

11/28/2003

**CONFIRMATION NO. 1718** 

371 FORMALITIES LETTER

\*OC000000022555700\*

Date Mailed: 02/20/2007

## NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 05/23/2006
- Copy of the International Search Report filed on 05/23/2006
- Copy of IPE Report filed on 05/23/2006
- Copy of Annexes to the IPER filed on 05/23/2006
- Information Disclosure Statements filed on 05/23/2006
- Oath or Declaration filed on 05/23/2006
- U.S. Basic National Fees filed on 05/23/2006
- Priority Documents filed on 05/23/2006
- Non-English Language Application filed on 05/23/2006
- Specification filed on 05/23/2006
- Claims filed on 05/23/2006
- Abstracts filed on 05/23/2006
- Drawings filed on 05/23/2006

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Translation of the application into English. Note a processing fee will be required if submitted later than 30 months from the priority date.
- Processing fee of \$130 for providing the translation of the application and/or the Annexes later than 30 months from the priority date (37 CFR 1.492(i)).

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:

• \$130 for English translation surcharge required.

Additionally the following defects have been observed:

• The translations of Annexes are canceled since the translations were not submitted prior to 30 months from the priority date.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web. <a href="https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF">https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF</a>. html

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <a href="http://www.uspto.gov/ebc">http://www.uspto.gov/ebc</a>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

BARBARA A CAMPBELL

Telephone: (703) 308-9140 EXT 217

#### PART 1 - ATTORNEY/APPLICANT COPY

		<del></del>
U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/580,361	PCT/DE04/02638	LEO 003 PA

FORM PCT/DO/EO/905 (371 Formalities Notice)